Please provide the following information, and submit to the NOAA DM Plan Repository.

## Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

## 1. General Description of Data to be Managed

## 1.1. Name of the Data, data collection Project, or data-producing Program:

Benthic Habitat Database

#### 1.2. Summary description of the data:

The NOAA Northeast Fisheries Science Center has, through the years, accumulated an extensive data base of qualitative and quantitative (wet weight and number per square meter) data on the composition, distribution and abundance (including a variety of environmental measurements) of the macrobenthic invertebrate fauna of the U.S.east coast continental shelf, slope and upper rise ranging from the mouth of the Bay of Fundy to Key West, Florida.

Benthic fauna data has been collected from 1881 to the present by the National Marine Fisheries Service Laboratories at Woods Hole, MA (early years Bureau of Fisheries) and Sandy Hook, NJ (formerly with the Bureau of Sport Fisheries). Little data exists from 1881 to around 1955. After intensive sampling, data became sparse again after 1986. The data includes the work by Wigley and Theroux on the macrofauna of the Northeastern United States. Other major studies include Ocean Pulse, the Northeast Monitoring Program, New York Bight, 12 Mile Dumpsite, Long Island Sound and Raritan Bay surveys. Parameters included in these surveys include depth, sediment type, gear type, number, weight, family, class, genus, species name, and abundance. A total of 21,000 sample sites are included in this data set with 4,000 meters being the maximum depth sampled. Bottom temperature from MBTs and XBTs were measured from the 1960s to the present.

## **1.3.** Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

## 1.4. Actual or planned temporal coverage of the data:

1880 to 1975, 1966 to 1992

## 1.5. Actual or planned geographic coverage of the data:

W: -82, E: -49.167, N: 49.167, S: 24.16666666667

US east coast continental shelf, slope and upper rise ranging from the mouth of the Bay of Fundy to Key West, Florida

#### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) Table (digital)

## 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: not applicable

Platform: Vessels: A.E.Verrill, Advance, Albatross I, Albatross III, Albatross IV, Antelope/Anderson, Asterias, Atlantic Twin, Blueback, Challenger, Delaware, Delaware II, Fish Hawk, Gilbert, Gosnold, Harengus, Kelez, Kyma, Mount Mitchell, Oregon II, Phalarope, Priscilla V., Researcher, Rorqual, Shirley & Roland, Silver Mink, Soop Ambrose Channel, SOOP Long Island Sound, SOOP Long Island Sound/Block Isl. Sound, Soop Raritan Bay, Soop Raritan Bay East, Venture, Whaling City

Physical Collection / Fishing Gear: Gears: 1-M. Plankton Net, 1-Meter Nat. Dredge, 1-Meter Sled Net, 40 Ft Shrimp Trawl, 6 Foot Seine, Beam Trawl, Bongo Nets, Bottom Skimmer, Campbell Grab, Clam Shell Dredge, Dietz Lafond Sampler, Digby Drag, Digby Scoop, Dip Net, Diving Person-Scuba, Dutch Herr. Trawl, Engle Mid-Water Trawl, Fish Stomachs, Hand Collection, Hydraulic Clam Dredge, Isaac-Kidd Mid-Water, Mbl Nat. Dredge, Miller Plankton Net, Misc. Gear, No Gear Info, One Half Meter Net, Otter Trawl, Petersen Grab, Plank. Misc. Gear, Pots, Quahog Dredge, Ring Or Stramin Net, Rock Dredge, Scallop Dredge, Scoopfish, Shrimp Gear Misc Types, Smith Mcintyre Grab, Submersible, Tangle, Van Veen Bcf 0.2m2, Whoi Chain Bag Dredge, Whoi Min. Van Veen, Whoi Pipe Dredge

#### 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

## 1.8.1. If data are from another observing system, please specify:

## 2. Point of Contact for this Data Management Plan (author or maintainer)

## 2.1. Name:

Patricia L Jones

#### 2.2. Title:

Metadata Contact

#### 2.3. Affiliation or facility:

#### 2.4. E-mail address:

patti.jones@noaa.gov

#### 2.5. Phone number:

508-495-2116

## 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

#### 3.1. Name:

Patricia L Jones

#### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

Unknown

## 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

## 5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Interest in and studies relating to the benthic invertebrate fauna of the marine environment off the coasts of the United States formally began in a systematically organized manner with the establishment, by Spencer F. Baird, of the U.S. Fish Commission in 1871. Woods Hole, MA was chosen as the site of the first permanent laboratory in the U.S. solely devoted to the scientific study of all aspects of the marine environment. Collections and data gathered on the benthic fauna from those early days, for the most part, were distributed to many other institutions and museums through the intervening years. However, some material (specimens and data) were preserved at the Woods Hole laboratory and have been incorporated into the data base and Specimen Reference Collection. The vast majority of the Woods Hole data and specimens, however, are the result of activities conducted at the Woods Hole Laboratory, beginning in the mid 1950's, as part of studies relating to the feeding habits of commercially important demersal fishes. The perceived lack of ecologically oriented data on the composition, distribution, abundance, and ecological and environmental relationships of the benthic fauna making up the diet of these fishes led to the establishment of studies designed to provide the necessary information on those topics. When the USGS Continental Margin Program was initiated in the early 1960's in cooperation with the Woods Hole

Oceanographic Institution, the Woods Hole Fisheries Lab's Benthic Dynamics Investigation, then conducting similar studies, was invited to join the effort to provide biological expertise. The Woods Hole samples were obtained by a wide variety of means including hand collecting in the intertidal zone to the use of research vessels (17 different ones) on 208 separate cruises using 49 different types of sampling gear ( ranging from dipnets to trawls, dredges, grab type devices etc.) at sea out to 4,000 meters depth.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

## 5.2. Quality control procedures employed (describe or provide URL of description):

Woods Hole Data was audited as part of a NODC Data Rescue project migrating the dataset to an Oracle database. Sandy Hook Data was merged into Oracle database as part of NODC Data Rescue.

#### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

- 6.1. Does metadata comply with EDMC Data Documentation directive?
  - 6.1.1. If metadata are non-existent or non-compliant, please explain:

#### 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

#### 6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/25749

## 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC\_PD-Data\_Documentation\_v1.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable

information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

## 7.1. Do these data comply with the Data Access directive?

Yes

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

## 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

## 7.2. Name of organization of facility providing data access:

Northeast Fisheries Science Center (NEFSC)

## 7.2.1. If data hosting service is needed, please indicate:

no

#### 7.2.2. URL of data access service, if known:

ftp://ftp.nefsc.noaa.gov/pub/dropoff/PARR/DMS/25749/

#### 7.3. Data access methods or services offered:

**NEFSC Data Access Procedure:** 

- 1. Formal request in writing usually to the data owner/contact or Center Director;
- 2. Requester is contacted by data owner to review and verify the request content and details for data delivery options.
- 3. If data is confidential then owner will determine if the data may be released to the requester;
- 4. If data can be released, the data is downloaded and packaged for delivery electronically; or the requester may be directed to where the data is available online.

## 7.4. Approximate delay between data collection and dissemination:

none

# 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

not applicable

## 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

## 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

Other

#### 8.1.1. If World Data Center or Other, specify:

Ocean Biogeographic Information System (OBIS)

## 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

## 8.2. Data storage facility prior to being sent to an archive facility (if any):

Northeast Fisheries Science Center - Woods Hole, MA

## **8.3.** Approximate delay between data collection and submission to an archive facility: none

# 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Scheduled backups and remote storage backups at NEFSC, archival of data set at OBIS

## 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.